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Title of Document Transmitted:	**TRANSMITTAL SHEETS AND BRIEF OF APPELLANTS.**
Applicant:	Jacobo Bibliowicz et al.
Serial No.:	09/982,224
Filed:	October 18, 2001
Group Art Unit:	2173
Title:	COLLABORATION FRAMEWORK
Our Ref. No.:	G&C 30566.198-US-01

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Name: Jason S. Feldmar
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G&C 30566.198-US-01

Due Date: August 27, 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Jacobo Bibliowicz et al.	Examiner:	Dennis G. Bonshock
Serial No.:	09/982,224	Group Art Unit:	2173
Filed:	October 18, 2001	Docket:	G&C 30566.198-US-01
Title:	COLLABORATION FRAMEWORK		

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MAIL STOP APPEAL BRIEF - PATENTS
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Due Date: August 27, 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	)	
	)	
Inventor: Jacobo Bibliowicz et al.	)	Examiner: Dennis G. Bonshock
	)	
Serial #: 09/982,224	)	Group Art Unit: 2173
	)	
Filed: October 18, 2001	)	Appeal No.: _____
	)	
Title: COLLABORATION FRAMEWORK	)	

BRIEF OF APPELLANTS

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR §41.37, Appellants hereby submit the Appellants' Brief on Appeal from the final rejection in the above-identified application, as set forth in the Office Action dated January 13, 2005.

Please charge the amount of $500 to cover the required fee for filing this Appeal Brief as set forth under 37 CFR §41.37(a)(2) and 37 CFR §41.20(b)(2) to Gates & Cooper LLP Deposit Account No. 50-0494.

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I. REAL PARTY IN INTEREST

The real party in interest is Autodesk, Inc., the assignee of the present application.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences for the above-referenced patent application.

III. STATUS OF CLAIMS

Claims 1-7, 9-16, 18-26, 28-35, 37-45, 47-54, 56 and 57 are pending in the application.

Claims 8, 17, 27, 36, 46, and 55 have been cancelled.

Claims 1-7, 9-16, 18-26, 28-35, 37-45, 47-54, 56 and 57 have been rejected under 35 U.S.C. §103(a) as being unpatentable in view of U.S. Patent No. 6,067,551 to Brown et al. (Brown), U.S. Patent No. 6,342,906 to Kumar et al. (Kumar), and U.S. Patent No. 6,195,751 to Caronni.

All of the above rejections are being appealed.

IV. STATUS OF AMENDMENTS

Appellants attempted to add new claims 58-60 after the final Office Action. Such claims had limitations similar to those in original dependent claims 16, 35, and 54. Nonetheless, the amendments were not entered based on a statement providing:

> though the new claims are similar to previously presented claims, they depend on claims that are very different.

While Appellant disagrees with such an assertion, for purposes of the Appeal and to expedite prosecution, Appellants will forego entry of the amendments. Accordingly, no amendments to the claims have been entered subsequent to the final Office Action.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claims 1, 12, 20, 31, 39, and 50 are generally directed to collaborating access to a drawing document on a server (see paragraph [0003] and [0007]). Independent claims 1, 20 and 39 are directed towards the server perspective while claims 12, 31, and 50 are directed towards a client/collaborator perspective. However, both groups of claims contain similar limitations.

All of the claims provide that a drawing document is stored on a server (see paragraph [0017], FIG. 1, and [0123]) and collaborators may view and work simultaneously on the server-based drawing document (see paragraph [0017], FIG. 1, [0021], [0022], [0037], [0122], FIG. 4, and [0123]). All of the claims further provide that the collaborators view changes to the document made by other collaborators in real time (see paragraph [0017], [0021], [0022], [0037], FIG. 4, [0121], [0123]). In all of the claims, such real-time viewing is enabled using heartbeat commands (see paragraph [0015], [0037], [0044], [0079]-[0092], [0124], FIG. 4). The heartbeat command, as set forth in all of the independent claims, is a command that is regularly transmitted at defined intervals (see paragraph [0096], [0125]). All of the independent claims further provide that the heartbeat command comprises a command (by one collaborator) to modify the drawing document (see paragraph [0022], [0121], [0124], and FIG. 4).

Independent claims 1, 20, and 39 provide the additional step where the server distributes the command (to modify the drawing document) to other collaborators as part of an additional/second heartbeat command (see paragraph [0125] and FIG. 4). In this regard, dependent claims 13, 32, and 51 provide a similar limitation in that a second command is received by a collaborator that is part of a second heartbeat command transmitted from another collaborator via the server (see paragraph [0125] and FIG. 4).

Accordingly, under all of the independent claims, the server maintains the document and enables simultaneous real-time viewing of the document using commands that are regularly transmitted at defined intervals.

Dependent claims 2, 21, and 40 provide that the server also maintains a history of modifications to the drawing document.

Dependent claims 3, 22, and 41 depend on claims 2, 21, and 40 respectively and further provide that the history is used to support an undo command. Similarly, dependent claims 14, 33, and 52 also provide that the command is an undo command.

Dependent claims 4, 23, and 42 depend on claims 2, 21, and 40 respectively and provide that the history is used to recommunicate modifications to the two or more collaborators.

Dependent claims 5, 24, and 43 provide that the server maintains a record of the collaboration session including the name, numbers, an status of the two or more collaborators.

Dependent claims 6, 15, 25, 34, 44, and 53 provide that the command is an XML command.

Dependent claims 7, 26, and 45 provide that the two or more collaborators all have write access for the drawing during the collaboration session.

Dependent claims 9, 28, and 47 provide for generating an identifier for the command that is distributed with the command to the session collaborators.

Dependent claims 10, 18, 29, 37, 48, and 56 all provide that the command specifies an object identifier for an object in the drawing document that is modified.

Dependent claims 11, 19, 30, 38, 49, and 57 all provide for an extensible set of 3D modeling tools that can be used to modify the drawing document.

Dependent claims 16, 35, and 54 provide for displaying a collaboration palette that provides information relating to the collaborators in the collaboration session.

VI. ISSUES TO BE REVIEWED ON APPEAL

Whether claims 1-7, 9-16, 18-26, 28-35, 37-45, 47-54, 56 and 57 are unpatentable under 35 U.S.C. § 103(a) as being rendered obvious by . U.S. Patent No. 6,067,551 to Brown, U.S. Patent No. 6,342,906 to Kumar, and U.S. Patent No. 6,195,751 to Caronni.

VII. ARGUMENT

A. Independent Claims 1, 20, and 39 Are Patentable Over The Prior Art

The final Office Action rejected independent claim 1 as follows:

> With regard to claim 1, Brown teaches a method of collaborating users access to a document on a network (see column 2, lines 48-65), storing a document on a server (see column 2, lines 56-61), receiving a request, in the server, to open the document (see column 10, lines 65 through column 11, line 3), establishing a collaboration session where the server permits two or more users to work simultaneously across a network on a document stored on the server (see column 2, lines 46-65), receiving a command to modify the document from a first user in the session (see column 3, lines 30-34), and the server distributing the command to modify to the other ones of the collaborators in the session (see column 4, lines 7-26). Brown, however, doesn't explicitly state that the document being shared is a drawing document. Kumar teaches as system of collaborating with a group of users on a project (see column 3, lines 33-51), similar to that of Brown, but further teaches the data in the shared workspace being a drawing document (see column 3, lines 39-51). It would have been obvious to one of ordinary skill in the art, having the teachings of Brown and Kumar before him at the time the invention was made to modify the collaborating system of Brown to share drawing documents. One would have been motivated to make such a combination because Brown states that the system can be implemented with other types of documents, where a drawing document as used in Kumar is an obvious choice. Brown further teaches, in column 1, lines 45-55, that the user regularly accesses

> common documents from the server, but doesn't specifically teach collaborators communicating the modifications of documents through the use of heartbeat commands regularly transmitted at defined intervals. Caronni teaches a system in which there is a group collaboration session between a plurality of users, in which revision information is passed between users (see column 6, lines 4-19 and column 12, lines 15-25), similar to that of Brown and Kumar, but further teaches, the transmission of updated revised information being transmitted by regularly transmitted heartbeat messages (see column 11, line 61 through column 12, line 52). It would have been obvious to one of ordinary skill in the art, having the teachings of Brown, Kumar, and Caronni before him at the time the invention was made to modify the notification system of Brown and Kumar to include the user of heartbeat commands, as did Caronni. One would have been motivated to make such a combination because in a system in which the current document must be kept up to date with the most current version of a document a regularly transmitted signal (such as heartbeat messages) would provide continual updating.

Independent claims 20 and 39 were rejected on nearly identical grounds. Accordingly, the arguments set forth below apply equally to claims 1, 20, and 39.

Brown merely describes a word processing program module having a multi-user editing capability provided for by the utilization of a multi-user control file (MCF) that is created when a document is first accessed. Thus, as admitted in the Office Action, Brown fails to address collaboration on a drawing document. Further, as clearly illustrated throughout Brown, Brown merely enables the use of duplicate copies on a local client. The users edit their respective local copies. Thereafter, the only time that the word processing document is updated with the server and the other users is when a user saves a change to a document locally. (See col. 2, lines 48- col. 3, line 6).

Thus, unlike the present claims, Brown fails to provide for the use of a regularly transmitted heartbeat command that is sent by the client to the server. Instead, Brown is forced to wait until a local client saves a local copy thereby causing a reconciliation process to begin. Such processing in Brown fails to provide for real-time simultaneous viewing and working with a document. In this regard, Brown fails to provide for a "collaboration" session as used in the claims. Instead, Brown merely describes sharing access to a document.

The Kumar reference also fails to cure the defects of Brown. Firstly, Kumar fails to teach the use of a server to maintain and store the drawing document during the collaboration as claimed. Secondly, Kumar fails to teach, describe, or suggest, implicitly or explicitly, the use of a heartbeat command that is transmitted at regular defined intervals as claimed. Instead, Kumar teaches the completion (i.e., fully processing) of a modification (and any update engendered by it). Once

completed, a serialized modification is sent to a collaborator (see col. 6, lines 58-67). Thus, Kumar does not teach the claimed transmission of a regular command at a defined interval.

The final Office Action admits that both Brown and Kumar fail to teach the heartbeat command of the present claims. Instead, the Action relies on Caronni to teach the system. However, Caronni fails in numerous aspects and actually teaches away from the invention as claimed. The primary difference between Caronni and the present invention relates to what the heartbeat command consists of. As specifically claimed, the heartbeat comprises "a command to modify the drawing document". Caronni completely fails to teach such a heartbeat command. Instead, Caronni's heartbeat command is merely a message that distributes a key to perform key translations that enables multiple collaborators to view collaboration messages (see col. 11, lines 15-18). Caronni's detailed description consistently states that the heartbeat commands relate to the transmission of the keys used to decode/encrypt the actual collaboration messages (see col. 11, lines 15-18, col. 11, line 51-col. 12, line 25, col. 12, lines 40-52, col. 13, lines 16-20, col. 13, lines 52-54, col. 13, line 66-col. 14, line 2, col. 14, line 8-29, col. 18, lines 49-55, etc.). As an example, col. 12, lines 15-25 provide:

> The heartbeat contains for each key the key's ID (e.g., a bit-value pair describing the key's location in database 300), version information, and revision information. In the distributed flat implementation the heartbeat message also includes the owner ID for each key. In early phases of group construction in the distributed flat implementation no previous common key exists, multiple creations of the same key are resolved as described below with respect to leave operations, except that a unicast connection is opened between the key holders to establish a previous key.

As can be seen from the above text, Caronni's heartbeat clearly relates to a key distribution system. In fact, nowhere in Caronni is there any description or suggestion, explicit or implicit, that the heartbeat command contains a modification to a drawing or any substantive text. Instead, Caronni consistently states that the keys received as part of the heartbeat command are used to encrypt actual data (see col. 14, lines 8-29). Further, col. 14, lines 23-26 specifically states that the keys are transmitted separately from the data itself. In this regard, Appellants also note that the present specification distinguishes the heartbeat command as claimed from commands relating to version information, establishing a session, etc. (see pages 13-38 of the present invention).

In addition to the above, Appellants submit that Caronni actually teaches away from the present invention. Specifically, in the presently claimed invention, the collaboration session allows

collaborators to view and work simultaneously wherein the collaborators can view modifications to the drawing (made by another collaborator) in real time. As part of this collaboration process, the heartbeat command is used to send the modifications to the drawing. Accordingly, if a particular collaborator does not view or ignores a heartbeat command, the collaborator may not-view, in real time, the modifications to the drawing document. Such collaboration and viewing of modifications to a drawing cannot be accomplished with Caronni's heartbeat command. Instead, since Caronni's heartbeat command relates to keys for collaborators in a collaboration session, col. 12, lines 48-52 specifically provides:

> The prospective new participant is only interested in at most W of the heartbeat messages and collects a table of owners of keys which he needs, and which are owned by different participants.

Thus, in Caronni, certain heartbeat command may be ignored by participants. In this regard, participants may only be interested in a subset of the heartbeat messages and not all of them. Such a teaching is clearly distinguishable and teaches away from the present invention. Again, Caronni's heartbeat commands are specifically used as part of the key distribution and management system. In this regard, Caronni's heartbeats do not comprise a "modification to the drawing document" as claimed.

In response to the above arguments set forth in response to the final Office Action, the Advisory Action provides:

> The office further stand by its' interpretation that the Heartbeat commands (as described in column 11, line 60 through column 12, line 15) of Caronni are analogous to those in the claimed invention.

Appellants respectfully disagree with and traverse such an assertion. Col. 11, line 50-col. 12, line 15 provides:

> Hence, the initial participant generates the keys it would have received from the group manager 118 in the centralized flat approach. The initial participant 101 starts a heartbeat announcing itself and the fact that it is key holder for the keys it just generated. Each participant 101 that is a key holder performs a regular heartbeat sending out a message containing its view of the newest keys. Optionally, the heartbeat includes a short history of previous keys, as an automatic retransmission in case some messages were lost. Each participant 101 that has recently has created a key, will consider itself a key holder of the created key so long as it holds the newest version of that key. When a participant received a heartbeat superseding it own (i.e. a heartbeat including a newer version of a key of which it considers itself a key holder), that participant will cease to consider itself a key holder of that key. Over time the distributed flat implementation reaches a stable state in which heartbeat messages produced by different key holders are equal. This results in a small number of messages being sent out in a regular fashion, in addition to the rocking messages. The newcomer also has to verify that the

> admitting node is trustworthy, if it does not want to risk a "man-in-the-middle" (or other impostor) attack.

As can be seen from the above text, Caronni merely describes a heartbeat command that announces itself and the fact that it is a key holder. The cited portion also provides that the heartbeat may include a short history of previous keys. Again, Caronni's heartbeat commands are strictly limited to keys and a key and distribution management system. Neither the Advisory Action nor any of the prior Office Action has disputed such an interpretation of Caronni. Instead, the Actions summarily provide that such a heartbeat is analogous to the claimed heartbeat. However, the claimed heartbeat specifically provides that it is a command to modify the drawing document. Caronni's heartbeat is not a command to modify a drawing document but merely contains a key used in a key management system. There is not even a remotely similarity between such a system as described in Caronni and that set forth explicitly in the present claims.

In addition, Appellants also note that in the present invention, the server maintains the drawing document and receives the heartbeat command with the modification to the drawing document. In response, the server transmits the modification as part of a second heartbeat command to other collaborators in the session. Such a structure is not even remotely suggested in Caronni.

Caronni sets forth two different types of collaboration sessions. In one type of session (referred to as a distributed flat implementation), multiple users collaborate with each other in a distributed environment. In such a scenario, no single server or location is used for a drawing document. Further, every participant has knowledge of group membership, and so every participant includes storage space for holding keying information shared with group members (see col. 5, lines 48-55). In the second type of session (referred to as a centralized flat implementation), communication is unidirectional wherein a single person transmits or broadcasts to a group (see col. 7, lines 59-63). Thus, under either implementation, Caronni fails to teach a server receiving and then distributing heartbeat commands with drawing changes (as claimed). Again, the current claims provide for any one of the collaborators to modify a drawing document and send the modification as part of a heartbeat command to a server which then distributes the modification as part of a second heartbeat command to the remaining collaborators. No such structure or model is used in either of Caronni's implementations. Instead, Caronni's heartbeat commands are sent from one

participant to another participant (in the distributed flat implementation) or from one sender to everyone (under the centralized flat implementation). Accordingly, Caronni (and the other cited references) fail to teach the use and implementation of the heartbeat commands as specifically claimed.

In response to these arguments previously submitted, the Advisory Action merely provides:

> With respect to the applicant arguing that Caronni fails to teach a server receiving and distributing heartbeat commands, it is maintained by the office that Caronni teaches the use of heartbeat commands, and an embodiment where a centralized entity is used for participant communication (see column 6, lines 5-43).

Appellants respectfully disagree and traverse such an assertion. As stated above, the present claims provide a unique sequence of events whereby a server receives a heartbeat command (that comprises a command to modify a drawing document) from one collaborator and the distributes the command to modify the drawing document as part of a second heartbeat command to other collaborators. Caronni fails to teach such a sequence of events. Instead, in the centralized flat implementation, an entity designated as a sender sends the commands to a group of participants. However, what is lacking is the content of such a second heartbeat command. As stated above, the claims provide that the second heartbeat consists of a command to modify a drawing document. No such command exists in Caronni. Instead, Caronni's single entity merely performs access control and communication with a group key management component to inform it of joins and leaves (see col. 7, line 59-col. 8, line 5). Such a teaching is not similar nor does it teach, disclose, or suggest, implicitly or explicitly, the various steps and limitations of those steps as set forth in the present claims.

In view of the above, Appellants submit that these independent claims are patentable over the cited references.

B. Independent Claims 12, 31, and 50 are Patentable Over the Prior Art

Independent claims 12, 31, and 50 were rejected on nearly identical grounds to that of claims 1, 20, and 39 (excluding the description of the second heartbeat command). Accordingly, Appellant reasserts the arguments above with respect to these independent claims.

C. Dependent Claims 13, 32, and 51 Are Patentable Over The Prior Art

These dependent claims add limitations to independent claims 12, 31, and 50 relating to the second heartbeat command as described above with respect to independent claims 1, 20, and 39. Accordingly, Appellants reassert the arguments relating to such a second heartbeat command contained above relating to independent claims 1, 20, and 39.

D. Dependent Claims 2, 21, and 40 Are Not Separately Argued

E. Dependent Claims 3, 22, and 41 Are Not Separately Argued

F. Dependent Claims 4, 23, and 42 Are Not Separately Argued

G. Dependent Claims 5, 24, and 43 Are Not Separately Argued

H. Dependent Claims 6, 15, 25, 34, 44, and 53 Are Patentable Over The Prior Art

Dependent claims 6, 15, 25, 34, 44, and 53 provide that the command is an XML command. In rejecting these claims, the Office Action merely refers to col. 18, lines 12-27 of Brown that merely states that no particular programming language is required and that many may be used. The final Office Action then concludes that XML would be an obvious choice for the network based application.

Appellants respectfully disagree and traverse the rejection. Namely, the claims specifically provide that the command to modify a drawing document is an XML command. It is clear that Brown completely fails to disclose XML in any manner, explicitly or implicitly. In addition, Appellants note that the Patent Office has not taken Official Notice of XML or the use of XML as set forth in the claims. Again, the claims provide for using XML in a particular manner in connection with a particular type of command as set forth in the claims. Nothing in Brown or the other cited references even remotely allude to XML or the use of XML as claimed.

In view of the above, Appellant respectfully requests reversal of the rejections.

I. Dependent Claims 7, 26, and 45 Are Not Separately Argued

J. Dependent Claims 9, 28, and 47 Are Not Separately Argued

K. Dependent Claims 10, 18, 29, 37, 48, and 56 Are Patentable Over The Prior Art

Dependent claims 10, 18, 29, 37, 48, and 56 all provide that the command specifies an object identifier for an object in the drawing document that is modified.

In rejecting these claims, the final Office Action submits that col. 4, lines 6-27 of Brown describes the tracking and saving of edited versions that contain id numbers. Col. 4, lines 6-27 provide:

> In yet another aspect of the present invention, a computer-readable medium is described on which is stored a computer program for implementing simultaneous, multi-user editing of the master copy of a document stored in memory of a shared server. The computer program instructions, when executed, create a multi-user control file on the shared server which is associated with the master copy of the document when the master copy is first accessed by a remote user. The computer program also creates a duplicate local copy of the document for each remote user. Thereafter, the multi-user control file assigns the master copy of the document and the local copies of the document a version identifier number. Once the version identifiers are assigned, the multi-user control file tracks the version identifiers of the local copies of the document in order to control the timing of the various saving actions of the users as edits are saved. The end result of executing the program instructions is the maintenance of an updated master copy of the document that reflects the latest edits saved by the plurality of users as the users simultaneously access and edit the master copy of the document.

As can be seen from this text, Brown does not even remotely describe objects within a drawing. In fact, Brown does not relate to drawing documents whatsoever. Without even referring to a drawing document, Brown cannot possibly teach or render obvious an object within a drawing document. Further, the above paragraph refers to versions and id numbers. Such versions and id numbers are not objects within a drawing that are modified. Instead, such an id number is merely the version of a document that is edited.

The claims specifically provide that the command to modify the drawing document specifies an object identifier for an object in the drawing document that is modified. Nowhere in Brown is there even a remote suggestion of such a drawing document, object, or modified object. Accordingly, Appellants respectfully request reversal of the rejection of these claims.

L. Dependent Claims 11, 19, 30, 38, 49, and 57 Are Patentable Over The Prior Art

Dependent claims 11, 19, 30, 38, 49, and 57 all provide for an extensible set of 3D modeling tools that can be used to modify the drawing document.

These claims are specific in that the drawing document may be modified based on a set of tools. The set of tools are 3D modeling tools. In addition, the set of tools are extensible. In rejecting these claims, the Office Action relies on Kumar col. 3, lines 3 and 39-51 and col. 4, lines 10-24 accompanied by the statement that the text describes a drawing document with a three-dimensional view which is editable by a drawing tool. Col. 3, line 39-51 provides:

> The invention provides a mechanism for a consistent, real-time collaboration environment in which any type of data can be shared in a common work space. In this invention, users connected to the system and engaged in a collaborative session share a common work space that is presented via each user's computer connected through a network. The data in the shared work space can be anything; e.g., a spreadsheet, an image, a simple text file, a text document, a drawing, a project schedule, a three-dimensional view, or any custom data. The work space for each participant is kept synchronized with everyone else. This can be done either through peer to peer messaging between the clients or through one or more servers.

Col. 4, lines 10-24 provide:

> As shown in FIG. 2, the invention uses an annotation layer for handling the discussion mode on top of any synchronized work space. The annotation layer appears as a transparent graphical object that covers the shared window displaying the synchronized application and the shared data. During the discussion mode, it appears to the user as if the application is covered by this transparent layer, and any mouse, keyboard or other input is caught by this layer. The annotation layer appears to handle each user input such as mouse and keyboard events to generate appropriate action such as moving a cursor, selecting a drawing tool and marking over an area or placing annotation text. All the annotation effects appear on the annotation layer itself, independent of the application underneath.

Such text merely provides that data in a shared work space may be a 3D view. Further, the text provides that FIG. 2 shows an annotation layer on top of a synchronized workspace. However, nowhere in the text is there any description, implicit or explicit, of a set of 3D modeling tools. The ability to show a 3D view does not even remotely hint at a 3D modeling tool. In addition, nowhere in the cited text (or the remainder of Kumar) is there a description or suggestion of a set of tools that are extensible.

Appellants note that under MPEP §2142 and 2143.03 "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165

USPQ 494, 496 (CCPA 1970)." In this regard, the Office Action is merely ignoring the specific claim limitations relating to the extensibility of the set of modeling tools. In addition, the Office Action fails to address the claim limitations that provide for a 3D modeling tool and instead refer to a 3D view that may be edited. The mere ability to edit a 3D view does not and cannot teach, disclose, or suggest a 3D modeling tool. Accordingly, the Office Action has failed to set forth a prima facie case of obviousness with respect to these dependent claims.

In view of the above, Appellants respectfully request reversal of the rejections.

M. Dependent Claims 16, 35, and 54 Are Patentable Over The Prior Art

Dependent claims 16, 35, and 54 provide for displaying a collaboration palette that provides information relating to the collaborators in the collaboration session.

In rejecting these claims, the Office Action merely provides that the limitations relate to maintaining a record of the collaboration session including name, numbers, and statuses of the collaborators and a record file for a user containing a name, a date/time number, and a user version identifier. However, such a teaching completely fails to address the primary limitation of these claims relating to the display of a collaboration palette. In this regard, the mere existence of a record or record file completely fails to even remotely describe, suggest, or allude to the display of such information to a user in a collaboration session. The display of collaboration user information provides a unique ability to inform collaborators who is currently in the collaboration session. The mere recordation of the information in a file to "keep track of the edits from each user before the edits of one user can be used to overwrite the master copy" (see col. 11, lines 3-8) is not even remotely similar to displaying user information nor does it provide the advantage or ability to inform users of those that are participating in the collaboration session. In this regard, the Office Action fails to address specific limitations in the dependent claims. Further, the prior art fails to address such limitations.

In view of the above, Appellants respectfully request reversal of the rejections.

N. Conclusion

In light of the above arguments, Appellants respectfully submit that the cited references do not anticipate nor render obvious the claimed invention. More specifically, Appellants' claims recite novel physical features which patentably distinguish over any and all references under 35 U.S.C. §§ 102 and 103. As a result, a decision by the Board of Patent Appeals and Interferences reversing the Examiner and directing allowance of the pending claims in the subject application is respectfully solicited.

Respectfully submitted,

GATES & COOPER LLP

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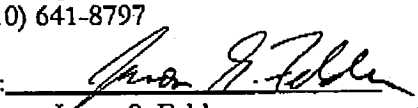
By: 
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Reg. No.: 39,187

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CLAIMS APPENDIX

1. (PREVIOUSLY PRESENTED) A method for collaborating access to a drawing document on a network, comprising:

storing a drawing document on a server;

receiving, in the server, a request to open the drawing document;

in response to the request, the server establishing a collaboration session, wherein during the collaboration session, the server permits two or more collaborators to view and work simultaneously across the network on the drawing document stored on the server, wherein each of the two or more collaborators view, in real time, a modification to the drawing document made by another collaborator;

receiving, in the server, a first heartbeat command regularly transmitted at a defined interval, wherein the first heartbeat command comprises a command to modify the drawing document from a first one of the collaborators in the collaboration session; and

the server distributing the command to modify the drawing document as part of a second heartbeat command to other ones of the collaborators in the collaboration session.

2. (ORIGINAL) The method of claim 1, further comprising the server maintaining a history of modifications to the drawing document.

3. (ORIGINAL) The method of claim 2, wherein the history is used to support an undo command.

4. (ORIGINAL) The method of claim 2, wherein the history is used to recommunicate modifications to the two or more collaborators.

5. (ORIGINAL) The method of claim 1, further comprising the server maintaining a record of the collaboration session including name, numbers, and statuses of the two or more collaborators.

6. (ORIGINAL) The method of claim 1, wherein the command comprises an extensible markup language (XML) command.

7. (ORIGINAL) The method of claim 1, wherein the two or more collaborators all have write-access for the drawing document during the collaboration session.

8. (CANCELLED)

9. (ORIGINAL) The method of claim 1, further comprising:

generating an identifier for the command;

distributing the identifier with the command to the other collaborators in the collaboration session.

10. (ORIGINAL) The method of claim 1, wherein the command specifies an object identifier for an object in the drawing document that is modified.

11. (ORIGINAL) The method of claim 1, wherein an extensible set of three dimensional modeling tools for modifying the drawing document is supported.

12. (PREVIOUSLY PRESENTED) A method for accessing a drawing document on a network, comprising:

joining an existing collaboration session comprised of a collaborator on a network, wherein during the collaboration session, collaborators in the collaboration session can view and work simultaneously across the network on a drawing document stored on a server, wherein each of the collaborators in the collaboration session view, in real time, a modification to the drawing document made by another collaborator; and

transmitting, to the server, a first heartbeat command regularly transmitted at a defined interval wherein the first heartbeat command comprises a command to modify the drawing document.

13. (PREVIOUSLY PRESENTED) The method of claim 12, further comprising receiving a second command to modify the document as part of a second heartbeat command from the server wherein the command was originally transmitted from another collaborator.

14. (ORIGINAL) The method of claim 12, wherein the command comprises an undo command.

15. (ORIGINAL) The method of claim 12, wherein the command comprises an extensible markup language (XML) command.

16. (ORIGINAL) The method of claim 12, further comprising displaying a collaboration palette that provides information relating to the collaborators in the collaboration session.

17. (CANCELED)

18. (ORIGINAL) The method of claim 12, wherein the command specifies an object identifier for an object in the drawing document that is modified.

19. (ORIGINAL) The method of claim 12, wherein an extensible set of three dimensional modeling tools for modifying the drawing document is supported.

20. (PREVIOUSLY PRESENTED) An system for collaborating access to a drawing document on a network comprising:

(a) a server connected to a network and having a memory and a data storage device coupled thereto;

(b) a drawing document stored on the server; and

(c) a computer program, performed by the server, the computer program configured to:

(i) receive a request to open the drawing document;

(ii) in response to the request, establishing a collaboration session, wherein during the collaboration session, the computer program permits two or more collaborators to view and work simultaneously across the network on the drawing document, wherein each of the two or more collaborators view, in real time, a modification to the drawing document made by another collaborator;

(iii) receive a first heartbeat command regularly transmitted at a defined interval wherein the first heartbeat command comprises a command to modify the drawing document from a first one of the collaborators in the collaboration session; and

(iv) distribute the command to modify the drawing document as part of a second heartbeat command to other ones of the collaborators in the collaboration session.

21. (ORIGINAL) The system of claim 20, wherein the computer program is further configured to maintain a history of modifications to the drawing document.

22. (ORIGINAL) The system of claim 21, wherein the history is used to support an undo command.

23. (ORIGINAL) The system of claim 21, wherein the history is used to recommunicate modifications to the two or more collaborators.

24. (ORIGINAL) The system of claim 20, wherein the computer program is further configured to maintain a record of the collaboration session including name, numbers, and statuses of the two or more collaborators.

25. (ORIGINAL) The system of claim 20, wherein the command comprises an extensible markup language (XML) command.

26. (ORIGINAL) The system of claim 20, wherein the two or more collaborators all have write-access for the drawing document during the collaboration session.

27. (CANCELLED)

28. (ORIGINAL) The system of claim 20, wherein the computer program is further configured to:

generate an identifier for the command;

distribute the identifier with the command to the other collaborators in the collaboration session.

29. (ORIGINAL) The system of claim 20, wherein the command specifies an object identifier for an object in the drawing document that is modified.

30. (ORIGINAL) The system of claim 20, wherein the computer program supports an extensible set of three dimensional modeling tools for modifying the drawing document.

31. (PREVIOUSLY PRESENTED) A system for accessing a drawing document on a network, comprising:

(a) a collaborator connected to a network and having a memory and a data storage device coupled thereto; and

(b) a computer program, performed by the collaborator, the computer program configured to:

(i) join an existing collaboration session comprised of a collaborator on a network, wherein during the collaboration session, collaborators in the collaboration session view and work simultaneously across the network on a drawing document stored on a server, wherein each of the collaborators view, in real time, a modification to the drawing document made by another collaborator; and

(ii) transmit, to the server, a first heartbeat command regularly transmitted at a defined interval, wherein the first heartbeat command comprises a command to modify the drawing document.

32. (PREVIOUSLY PRESENTED) The system of claim 31, the computer program further configured to receive a second command, as part of a second heartbeat command, to modify the document from the server wherein the command was originally transmitted from another collaborator.

33. (ORIGINAL) The system of claim 31, wherein the command comprises an undo command.

34. (ORIGINAL) The system of claim 31, wherein the command comprises an extensible markup language (XML) command.

35. (ORIGINAL) The system of claim 31, further, wherein the computer program is further configured to display a collaboration palette that provides information relating to the collaborators in the collaboration session.

36. (CANCELLED)

37. (ORIGINAL) The system of claim 31, wherein the command specifies an object identifier for an object in the drawing document that is modified.

38. (ORIGINAL) The system of claim 31, wherein the computer program supports an extensible set of three dimensional modeling tools for modifying the drawing document..

39. (PREVIOUSLY PRESENTED) An article of manufacture comprising a program storage medium readable by a computer and embodying one or more instructions executable by the computer to perform a method for collaborating access to a drawing document on a network, the method comprising:

storing a drawing document on a server;

receiving, in the server, a request to open the drawing document;

in response to the request, the server establishing a collaboration session, wherein during the collaboration session, the server permits two or more collaborators to view and work simultaneously across the network on the drawing document stored on the server, wherein each of the two or more collaborators view, in real time, a modification to the drawing document made by another collaborator;

receiving, in the server, a first heartbeat command regularly transmitted at a defined interval, wherein the first heartbeat command comprises a command to modify the drawing document from a first one of the collaborators in the collaboration session; and

the server distributing the command to modify the drawing document as part of a second heartbeat command to other ones of the collaborators in the collaboration session.

40. (ORIGINAL) The article of manufacture of claim 39, wherein the method further comprises the server maintaining a history of modifications to the drawing document.

41. (ORIGINAL) The article of manufacture of claim 40, wherein the history is used to support an undo command.

42. (ORIGINAL) The article of manufacture of claim 40, wherein the history is used to recommunicate modifications to the two or more collaborators.

43. (ORIGINAL) The article of manufacture of claim 39, wherein the method further comprises the server maintaining a record of the collaboration session including name, numbers, and statuses of the two or more collaborators.

44. (ORIGINAL) The article of manufacture of claim 39, wherein the command comprises an extensible markup language (XML) command.

45. (ORIGINAL) The article of manufacture of claim 39, wherein the two or more collaborators all have write-access for the drawing document during the collaboration session.

46. (CANCELLED)

47. (ORIGINAL) The article of manufacture of claim 39, wherein the method further comprises:

generating an identifier for the command;

distributing the identifier with the command to the other collaborators in the collaboration session.

48. (ORIGINAL) The article of manufacture of claim 39, wherein the command specifies an object identifier for an object in the drawing document that is modified.

49. (ORIGINAL) The article of manufacture of claim 39, wherein the method further comprises providing an extensible set of three dimensional modeling tools for modifying the drawing document.

50. (PREVIOUSLY PRESENTED) An article of manufacture comprising a program storage medium readable by a computer and embodying one or more instructions executable by the computer to perform a method for accessing a drawing document on a network, the method comprising:

joining an existing collaboration session comprised of a collaborator on a network, wherein during the collaboration session, collaborators in the collaboration session view and work simultaneously across the network on a drawing document stored on a server, wherein each of the collaborators view, in real time, a modification to the drawing document made by another collaborator; and

transmitting, to the server, a first heartbeat command regularly transmitted at a defined interval, wherein the first heartbeat command comprises a command to modify the drawing document.

51. (PREVIOUSLY PRESENTED) The article of manufacture of claim 50, wherein the method further comprises receiving a second command, as part of a second heartbeat command, to modify the document from the server wherein the command was originally transmitted from another collaborator.

52. (ORIGINAL) The article of manufacture of claim 50, wherein the command comprises an undo command.

53. (ORIGINAL) The article of manufacture of claim 50, wherein the command comprises an extensible markup language (XML) command.

54. (ORIGINAL) The article of manufacture of claim 50, wherein the method further comprises displaying a collaboration palette that provides information relating to the collaborators in the collaboration session.

55. (CANCELLED)

56. (ORIGINAL) The article of manufacture of claim 50, wherein the command specifies an object identifier for an object in the drawing document that is modified.

57. (ORIGINAL) The article of manufacture of claim 50, wherein the method further comprises providing an extensible set of three dimensional modeling tools for modifying the drawing document.

58. (NEW) The method of claim 1, further comprising displaying a collaboration palette comprising information relating to the collaborators in the collaboration session.

59. (NEW) The system of claim 20, further comprising an application executing on a client of one of the collaborators configured to display a collaboration palette that provides information relating to the collaborators in the collaboration session.

60. (NEW) The article of manufacture of claim 39, wherein the method further comprises displaying a collaboration palette comprising information relating to the collaborators in the collaboration session.